

B1 3. (Amended) The hydrogel precursor composition of claim 1, wherein said polymer domain comprises poly(ethylene glycol), poly(vinyl alcohol), poly(vinyl pyrrolidone), poly(ethyl oxazoline), poly(acrylic acid), poly(acrylamide), poly(styrene sulfonate), poly(amino acids), polysaccharides, or copolymers thereof.

Mr D17 4. (Amended) The hydrogel precursor composition of claim 1, wherein said chemical protecting group is β -cyclodextrin.

D2 11. (Amended) The hydrogel precursor composition of claim 10, wherein said molecule that covalently binds to said hydrophobic interacting groups is hydrophilic.

12. (Amended) The hydrogel precursor composition of claim 1, wherein said polymer domain comprises poly(ethylene glycol) and said hydrophobic interacting groups are perfluorinated hydrocarbons.